IN THE DISCLOSURE:

Delete original **Paragraph 3** on Page 1 of the specification and replace it with the following new Paragraph 3:

With Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(ii))

A multi-cylinder internal combustion engine can produce excessive smoke during low engine speeds if the air feed passage terminates at the manifold. Combustion airflow fed into the manifold from a feed passage can have an unstructured characteristic and can become chaotic once in the manifold. The chaotic airflow motion in the manifold continues into the inlet port to the combustion chamber and causes the in-cylinder swirl motion to become unstable resulting in incomplete combustion. Smoke issues are limited at higher speeds due to the airflow structure changing with the airflow speed. One solution is to adapt the port shape design, but this will result in high development costs and may have a negative impact on the performance at higher engine speeds where emission levels are critical. Further challenges may arise due to restrictions to the design of the manifold itself, as the availability of multiple customer options may depend on particular manifold configurations. The present disclosure is directed at overcoming one or more of the above identified problems.

Without Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(iii))

A multi-cylinder internal combustion engine can produce excessive smoke during low engine speeds if the air feed passage terminates at the manifold. Combustion airflow fed into the manifold from a feed passage can have an unstructured characteristic and can become chaotic once in the manifold. The chaotic airflow motion in the manifold continues into the inlet port to the combustion chamber and causes the in-cylinder swirl motion to become unstable resulting in incomplete combustion. Smoke issues are limited at higher speeds due to the airflow structure changing with the airflow speed. One solution is to adapt the port shape design, but this will result in high development costs and may have a negative impact on the performance at higher engine speeds where emission levels are critical. Further challenges may arise due to restrictions to the design of the manifold itself, as the availability of multiple customer options may depend on particular manifold configurations. The present disclosure is directed at overcoming one or more of the above identified problems.

Delete original **Paragraph 19** on Page 5 of the specification and replace it with the following new Paragraph 19:

With Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(ii))

Fig. 4 shows a second embodiment of the present disclosure. Manifold 220 is shown as having cylinder ports 222a, 222b and 222c, but the principle is applicable to manifolds with any number of cylinder ports. Manifold 220 further has a plurality of openings adapted to receive a feed passage such as feed passage 218. In Fig. 4 a possible arrangement is given as example showing two openings. However, more openings could be present to offer a larger degree of flexibility in installation options. The arrangement shown has feed passage 218 connected to manifold 220 via opening 219 in surface 225 of manifold [120] 220. Feed passage 218 is connected via flange 224 to the top side of manifold 220, but a different arrangement may be achieved by removing manifold cover plate 223 to reveal opening 221.

Without Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(iii))

Fig. 4 shows a second embodiment of the present disclosure. Manifold 220 is shown as having cylinder ports 222a, 222b and 222c, but the principle is applicable to manifolds with any number of cylinder ports. Manifold 220 further has a plurality of openings adapted to receive a feed passage such as feed passage 218. In Fig. 4 a possible arrangement is given as example showing two openings. However, more openings could be present to offer a larger degree of flexibility in installation options. The arrangement shown has feed passage 218 connected to manifold 220 via opening 219 in surface 225 of manifold 220. Feed passage 218 is connected via flange 224 to the top side of manifold 220, but a different arrangement may be achieved by removing manifold cover plate 223 to reveal opening 221.

Delete original **Paragraph 22** on Page 6 of the specification and replace it with the following new Paragraph 22:

With Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(ii))

To achieve this, the illustrated embodiments of the present disclosure shows feed pipe 118 having an end section 126,[2] 226 located within manifold 120, 220. End section 126, 226 is formed in such a way that it hinders air exiting end section 126, 226 through opening 128, 228 in a direction away from cylinder ports 122, 222, creating a much improved airflow structure in the manifold, encouraging a substantially even air distribution to cylinder ports 122, 222. This has a direct and positive impact on the combustion process, as the structured air flow and even air distribution improve the in-cylinder swirl, which is critical for achieving optimum combustion. In use, combustion air is supplied to a combustion chamber or other combustion site (not shown) via an engine air induction system as described above. Fuel is also supplied to the combustion site via suitable, well known mechanisms such as fuel injectors for example. The fuel and air are combusted, for example by compression ignition or spark ignition. Particle emissions are reduced compared to prior designs by supplying the combustion air to the combustion site via an engine air induction system as described above. These reduced emissions can be achieved especially at relatively low engine speeds. Although the various embodiments are described above, those skilled in the art will appreciate that modifications may be made without departing from the scope of the following claims.

Without Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(iii))

To achieve this, the illustrated embodiments of the present disclosure shows feed pipe 118 having an end section 126, 226 located within manifold 120, 220. End section 126, 226 is formed in such a way that it hinders air exiting end section 126, 226 through opening 128, 228 in a direction away from cylinder ports 122, 222, creating a much improved airflow structure in the manifold, encouraging a substantially even air distribution to cylinder ports 122, 222. This has a direct and positive impact on the combustion process, as the structured air flow and even air distribution improve the in-cylinder swirl, which is critical for achieving optimum combustion. In use, combustion air is supplied to a combustion chamber or other combustion site (not shown) via an engine air induction system as described above. Fuel is also supplied to the combustion site via suitable, well known mechanisms such as fuel injectors for example. The fuel and air are combusted, for example by compression ignition or spark ignition. Particle emissions are reduced compared to prior designs by supplying the combustion air to the combustion site via an engine air induction system as described

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above. These reduced emissions can be achieved especially at relatively low engine speeds. Although the various embodiments are described above, those skilled in the art will appreciate that modifications may be made without departing from the scope of the following claims.

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Delete the **Abstract** on page 13 of the specification and replace it with the following new Abstract:

With Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(ii))

Chaotic air flow structures in internal combustion engine manifolds may lead to poor combustion performance and hence undesirable emissions such as visible smoke. Manifolds with flow characteristics compromised by other design requirements are especially prone to these poor characteristics. To overcome these, an engine air induction arrangement ~~comprises~~ includes a feed passage having an end portion in a manifold with cylinder ports. The end portion is formed in such a manner that air exiting the end portion via an opening is hindered from travelling away from the cylinder ports. This improves the flow structure and evens air distribution to the cylinder ports, hence improving the combustion process and reducing emission levels.

Without Underlining/Strikethrough/Brackets (37 CFR 1.121(b)(1)(iii))

Chaotic air flow structures in internal combustion engine manifolds may lead to poor combustion performance and hence undesirable emissions such as visible smoke. Manifolds with flow characteristics compromised by other design requirements are especially prone to these poor characteristics. To overcome these, an engine air induction arrangement includes a feed passage having an end portion in a manifold with cylinder ports. The end portion is formed in such a manner that air exiting the end portion via an opening is hindered from travelling away from the cylinder ports. This improves the flow structure and evens air distribution to the cylinder ports, hence improving the combustion process and reducing emission levels.